

Claims

We claim:

1) A guard for a flexible element cutting device having at least one cutting element traveling in a circular plane, the cutting element having a length, a center of rotation, and a distal end, the guard comprising a guard portion and a perimeter edge, the perimeter edge forming a continuous circular edge above the circular plane of travel of the cutting element at a radius less than the length of the cutting element, said guard portion extending from said perimeter edge to adjacent said center of rotation.

2) A guard for a flexible element cutting device according to claim 1, wherein said radius is between about 80% and 95% of the length of the cutting element.

3) A guard for a flexible element cutting device according to claim 1, wherein said perimeter edge is spaced apart from said circular plane between about 1/8" and 3/8".

4) A guard for a flexible element cutting device according to claim 1, wherein said guard portion forms an arcuate circle of revolution.

5) A guard for a flexible element cutting device according to claim 1, further comprising a mounting feature, said mounting feature mounting said guard portion to a flexible element cutting device.

6) A guard for a flexible element cutting device according to claim 1, further comprising at least one cutter attached to said guard portion, said cutter being located at a radius greater than the radius of the perimeter edge and extending into the circular plane of travel of the at least one cutting element.

7) A guard for a flexible element cutting device having a center assembly and a rotating element, said guard comprising:

a perimeter wall, said perimeter wall forming a cylindrical wall above a cutting plane formed by the rotating cutting element;

a cover, said cover extending from said perimeter wall to a location adjacent to said center shaft;

a cover mount, said cover mount connecting said cover to said center assembly;
and

at least one flexible element cutter, said flexible element cutter offset from said perimeter wall and extending into said cutting plane formed by the rotating cutting element.

8) A guard for a flexible element cutting device according to claim 7, wherein said flexible cutting element has a length extending from a center of rotation to a distal

end, said perimeter wall forming a cylindrical wall at a radius about the center of rotation of the cutting element, said radius being less than the length of the cutting element.

9) A guard for a flexible element cutting device according to claim 8, wherein said radius is between about 80% and 95% of the length of the cutting element.

10) A guard for a flexible element cutting device according to claim 7, wherein said perimeter wall is spaced about 1/8" to 3/8" above said cutting plane formed by the rotating cutting element.

11) A guard for a flexible element cutting device having a center assembly and a rotating element, said guard comprising a first guard half and a second guard half, said first guard half being engageable with said second guard half to form a perimeter wall and a cover, said perimeter wall forming a cylindrical wall above a cutting plane formed by the rotating cutting element; said cover extending from said perimeter wall to a location adjacent said center assembly.

12) A guard for a flexible element cutting device according to claim 11, wherein said first guard half and said second guard half when engaged further form a cover mount, said cover mount connecting said cover to said center assembly.

13) A guard for a flexible element cutting device according to claim 11, wherein said flexible cutting element has a length extending from a center of rotation to a distal end of said cutting element, said perimeter wall forming a cylindrical wall at a radius about the center of rotation of the cutting element, said radius being less than the length of the cutting element.

14) A guard for a flexible element cutting device according to claim 13, wherein said radius is between about 80% and 95% of the length of the cutting element.

15) A guard for a flexible element cutting device according to claim 11, wherein said perimeter wall is spaced about 1/8" to 3/8" above said cutting plane formed by the rotating cutting element.

16) A guard for a flexible element cutting device having a center assembly and a rotating element, said guard comprising a plurality of guard portions, said plurality of guard portions being engageable with each other to form a perimeter wall and a cover, said perimeter wall forming a cylindrical wall above a cutting plane formed by the rotating cutting element; said cover extending from said perimeter wall to a location adjacent said center assembly.

17) A guard for a flexible element cutting device according to claim 16, wherein said plurality of guard portions when engaged further form a cover mount, said cover mount connecting said cover to said center assembly.

18) A guard for a flexible element cutting device according to claim 16, wherein said flexible cutting element has a length extending from a center of rotation to a distal end of said cutting element, said perimeter wall forming a cylindrical wall at a radius about the center of rotation of the cutting element, said radius being less than the length of the cutting element.

19) A guard for a flexible element cutting device according to claim 18, wherein said radius is between about 80% and 95% of the length of the cutting element.

20) A guard for a flexible element cutting device according to claim 16, wherein said perimeter wall is spaced about 1/8" to 3/8" above said cutting plane formed by the rotating cutting element.